

THE CITY OF SAN DIEGO
**URBAN RUNOFF
MANAGEMENT PLAN**

FISCAL YEAR 2002 ANNUAL REPORT

JULY 1, 2001 - JUNE 30, 2002





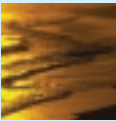
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Department of General Services
Ernie Anderson, Director



DICK MURPHY
MAYOR

The attached Annual Report is a full accounting of how the City has complied in the first year with our Urban Runoff Management Plan.

San Diego's quality of life is inextricably linked to the quality of our beaches, bays and waterways. This is why "Cleaning up our Beaches and Bays" is one of ten goals for the Mayor's administration. To accomplish this goal, we embarked on a process to shore up the City's basic infrastructure and began educating the public on how they can help prevent storm water pollution.

In our first two years of focused effort, we have reduced sewer spills by 40% and beach postings and closures are down 45%. Some of the key organizational changes that are helping us achieve our goals are:

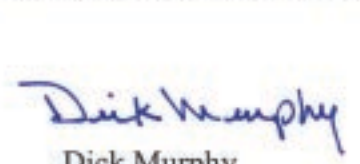
Clean Water Task Force- We have assembled key members of the local environmental, regulatory, science, education, and business communities to advise the City on the policies to improve water quality and the City's Urban Runoff Management Plan.


Organizational Change- The City's Storm Water Pollution Prevention Program was elevated to a Division in the City organization, and is tasked with drafting the Urban Runoff Management Plan and overseeing the City's storm water compliance efforts.

Leadership Through Employees- We have trained all 12,000+ City employees on Storm Water Pollution Prevention principles, and have empowered them to be "Clean Water Leaders" both on the job and in their own neighborhoods.

Improving water quality in San Diego will remain a top priority of this City Council in spite of the looming fiscal crisis with the State Budget. We will continue San Diego's leadership role in the region on water quality protection and look forward to working with you in our pollution prevention efforts.

Thank you for your ongoing commitment to water quality improvements.


Dick Murphy
Co-Chair
Clean Water Task Force


Scott Peters
Co-Chair
Clean Water Task Force

City of San Diego – Leading The Way To Cleaner Beaches and Bays



San Diego is a remarkable place. The natural beauty of our rugged coastline, mountainous inland areas and desert plateaus melds together in a seemingly seamless fabric of bio-diversity that is breathtaking. Yet our natural beauty struggles to endure and overcome the adverse water quality impacts our urbanized lifestyle brings to our rivers, creeks, lakes, bays, wetlands and ocean. Because San Diegans are water loving and water playing people, clean beaches and bays define the quality life they expect. And that’s why the City of San Diego is leading the way to cleaner beaches and bays



despite the restrictive financial constraints our weak economy brings to all levels of government.

The updated Municipal Storm Water Permit issued by the Regional Board in February 2001 not only set the course for the San Diego region, but it also raised the bar for everyone in California to clean up recreational waters. The City of San Diego welcomes the new permit as a structural guide that set the floor for achieving our own goal of reducing beach postings and closures by 50 percent in 2004. It’s a goal we intend to achieve.

Leadership

Changing the corporate culture of a large organization takes leadership. Mayor Dick Murphy identified “Clean Up Our Beaches and Bays” as one of his top ten goals in his first State of the City address. Goal number four called for a 50 percent reduction of beach closures and



postings by 2004. In January 2001, the Storm Water Pollution Prevention Program was elevated to a City Division and given the authority to lead the City of San Diego’s efforts to protect our beaches, bays and watersheds. With the support of our Mayor and City Council, urban runoff gained visibility within the City of San Diego as an important issue. More resources, roughly \$3 million in additional funds, were devoted to city-wide pollution prevention efforts in fiscal year 2002. The Storm Water Division staffing increased by 110 percent from 12 positions to 25. The City team

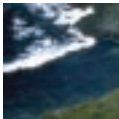
became stronger as highly skilled and talented professionals who are passionate about making a difference in protecting water quality were hired. Within months of the San Diego’s Leadership’s call to action, a work program was developed, funded, and for the first year, implemented to specifically combat bacterial pollution at the beaches. Substantial beach posting reduction of 36 percent was achieved in the first year and 45 percent through December 2002. ...**We are the Leaders!**

Progress and Success

Resources are an issue, but we weren’t going to hide behind it. Our reduction in postings and closures are the result of focus and resolve. Since the issuance of the new permit, the City has had many successes and made significant progress on our long list of storm water pollution prevention efforts. We have also identified major challenges that will take time and additional resources before fundamental cultural changes are achieved and sustained.



Timeline/Milestones	1999		2000
	June	October	June
	Enforcement Team for storm water violations Approved	THINK BLUE Debut	Enforcement Actions Begin
	City Council approved \$732,000 to implement administrative penalties for storm water violations in FY2000 budget	Storm water pollution prevention outreach and education campaign	First administrative citations issued for storm water violations by enforcement team



We set ourselves apart from the rest by how we tackled the **Urban Runoff Management Plan** creation. The Plan essentially outlines a process to overcome two challenges in achieving cleaner beaches, bays and watersheds: the large and diverse community of San Diego (residents,



business and industry), and the complex City organizational structure. Taking into consideration the City's size and organizational com-

plexity, the City's Urban Runoff Management Plan's components were tailored specifically for each department to provide a user-friendly tool to guide City employees in implementing the phased \$27- on up to \$55- million dollar annual City-wide storm water activities required of their departments and instructs department mangers on activity, budget and reporting requirements. Simply put, the City recognized that an easier-to-understand implementation strategy means more clean water faster. The formal process for ensuring accountability by each department charged with program implementation was particularly notable as documented in a recent EPA audit. The Plan was made available to the world on the City's website, www.Thinkbluesd.org. Other agencies within California have found the document helpful to them in creating a plan for their own jurisdictions.

The first and most important challenge is creating an **Educational Campaign** with tools to achieve a cultural shift in polluting behaviors and practices in both the **community and in the City organizational structure**. Everyone needs to be aware of the issue and



make behavioral changes in order to protect and clean up our beaches and bays. The challenge for the City is twofold. First, the City of

San Diego is a large organization with more than 12,000 employees. It is imperative that we educate and train each City employee to understand his or her role in insuring that the City acts responsibly to keep our beaches and bays pollution free. Last year, all City employees received general storm water training and learned how to be "Clean Water Leaders" and how to "Think Blue" while doing their jobs. The training film, "Storm Water and You," was recognized as the best employee training video in the nation by the City County Communications Management Association and named the outstanding environmental film at the September 2002 Savvy Awards.



Second, it is essential that we do everything possible to assist the community in achieving those behavior changes. Thus we

assisted them via "Think Blue," a bi-lingual English and Spanish education, outreach and media campaign. The campaign focused on the positive desire of people to do the right thing. Most San Diegans who practice behaviors that result in the introduction of pollutants to our waterways do so without malice. Three attention grabbing and visually appealing public services announcements were produced and aired on local television and radio stations. These announcements received critical local and national acclaim. More importantly, storm water



pollution has resonated with local residents and the media as a quality of life issue. "Think Blue" awareness has increased by 14 per-

centage points in just one year. Contributions of additional public service announcement airing, news story features, and other promotions from local broadcast companies were unprecedented. The shared passion for this issue and the belief that local media can play a role in the efforts to clean up San Diego's beaches and bays was and continues to be remarkable.

The quality of the comprehensive "Think Blue" campaign caught the eye of the United States Environmental Protection Agency, which named "Think Blue" the model urban runoff education and outreach program for large metropolitan areas.

For those residents and business owners who were less willing to do what they should do to protect our beaches, bays, and watersheds, **Enforcement** of the storm water ordinance provided an effective method of achieving future compliance and discourages continuation of



polluting practices. The storm water enforcement policies and procedures were already in place and code compliance officers



Timeline/Milestones	2001 January	January	January	February	February
	Storm Water Division Created	Goal #4 *Clean Up Our Beaches and Bays Announced	Beach Posting Reduction Work Plan Established	Storm Water Action Team (SWAT) Formed	Updated Municipal Storm Water Permit Issued
	City Manager elevates the existing storm water program to a division within the General Services Department	Mayor establishes Clean Up Our Beaches and Bays as one of his ten goals for the City	Work plan created to support 50% beach posting reduction by 2004	City set engineering inspection protocol during rain events	Order No. 2001-01 adopted by the San Diego Regional Water Quality Control Board



trained, so no ramping up was needed when the Regional Board issued the updated Municipal Permit. In June 1999, the City Council approved the resources to establish this enforcement program and to aggressively pursue violators using all remedies allowable within the San Diego Municipal Code. Administrative citations and administrative civil penalties have been used as well as civil and criminal prosecution. The number of investigations referred by City employees increased from the prior year because City employees were informed, having received general storm water training. The number of investigations and enforcement actions increased as well. Based upon feedback from the community, in 2001, we enhanced our customer service by allocating staff to answer the storm water hotline on weekdays during regular working hours. This has resulted in a significant increase in reports.

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The City of San Diego embraced the opportunity to lead the development of the **Model Standard Urban Storm Water Mitigation Plan (SUSMP)** and four **Watershed Urban Runoff Management Programs**. The City also was innovative in how redevelopment and infill project issues were addressed in the Model SUSMP. The **Localized Equivalent Area Drainage method, or LEAD Method**, was created with the intent to obtain clean water quicker within existing urbanized areas. The LEAD method requires the removal of equal or greater pollutant loads, looking at each pollutant individually, from a nearby drainage basin by constructing a strategically located treatment facility. The City shares this accomplishment with the others who worked with us to refine LEAD method, in particular San Diego Baykeeper, the local American Public Works Association Water Resources Committee, and Regional Board staff.



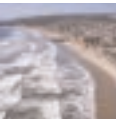
We're proud to report that we've received more than \$6.5 million in **Grant Funding** for projects in Mission Bay and the San Diego River

watershed during the past year. In early 2002, the City created the Mission Bay Water Quality Management Plan, which consists of seven separate water quality projects, and established a Mission Bay Clean Water Technical Advisory Committee as a forum for project team leaders, technical advisors, contract managers, and the public to share information with each other.

For the **Construction** industry, the City worked with the Engineering & General Contractors Association (EGCA) to create a comprehensive sediment and erosion control



training course which has been offered routinely for the past year and has trained hundreds of individuals. We also submitted and published a series of Storm Water compliance articles in the EGCA Magazine and gave storm water presenta-



component has been added to the City's mandatory training course for Resident Engineers and Project Managers.

The City of San Diego developed the **Strategic Framework Element**, as the first step in comprehensively updating the City's General Plan since 1979. It will provide **increased emphasis on water quality**. In a recent audit, the City's strategy for incorporating water quality principles into



the General Plan was identified as a notable strength in the City's Urban Runoff Management Program efforts. The Strategic Framework Element contains a strategy called the "City of Villages" to direct future growth as San Diego shifts from an era of building upon

tions at numerous engineering, architecture, and contractor association meetings. Internally, a Storm Water

Timeline/Milestones	2001 February	March	April	May	May	June
	City Hotline Staffed	Clean Water Task Force Formed	City's Model SUSMP Development Begins	City designated as Watershed Lead	Mission Bay RV Dump Station Repaired	Storm Water Division staffing Increased
	Pollution report calls answered by live operator	Mayor Dick Murphy creates the Clean Water Task Force to advise on water quality issues	The City leads the development of the Model Standard Urban Storm Water Mitigation Plan (SUSMP) for the San Diego region	For: Mission Bay, San Dieguito, Peñasquitos, and San Diego River	Containment berms and improved signage installed	A 90% increase in staffing, from 13 to 25 positions, as City Council approves \$3 million citywide increase for storm water pollution prevention efforts in FY2002 budget



abundant open land to one of reinvesting in existing communities. It represents the City's new approach to shaping urban growth while preserving the character of its communities and its most treasured natural resources and amenities. The plan relies on innovative principles such as mixed use development, pedestrian oriented development, decreased dependency on auto transportation, and sensitive site design, among others to reshape San Diego. All of these principles provide a framework for future development that will be sensitive to the protection of water resources.

A **Five-Year Action Plan** is a companion document to the Strategic Framework Element, and identifies specific actions to be taken to implement the goals and policies of the Strategic Framework Element. A key water quality influenced component of the Five-Year Action Plan is the adoption of a new **Conservation Element** to the Progress Guide and General Plan with significant **Policies Devoted to Water Resources and Water Quality**.

A Brave New World

In this **First Year** of the updated Municipal permit, the City **Leveraged Current Resources** by focusing on some key programs. These programs include: employee training, good housekeeping, and education & outreach — all

will prevent pollution from happening in the first place. Other established programs, such as enforcement of the storm water ordinance and the household hazardous waste program, continue to be key elements of our ongoing efforts to effectively deter polluting habits of residents, business and industry.

We **Established New Programs** required by the updated Municipal Permit. We acknowledge some were easier to do than others within the



time allowed and available resources. The **Industrial/Commercial** program is in its infancy. It is anticipated that this program will be

enhanced and strengthened over time using established inspection groups, input from the business community, and collaboration with the Regional Board.

New **Storm Water Construction Site Inspections** are being conducted and outreach to the industry is ongoing. Yet compliance in the field wanes



because of the new concepts that the City and the construction industry are required to embrace. The City is working diligently to increase

the level of understanding of the City inspectors who are responsible for implementation in the field as well as planners and engineers reviewing development projects during the planning and design stage. The Storm Water Pollution Prevention Program continues to meet with key departments and personnel to modify internal policies and procedures to increase effectiveness.

And, as the City moves forward the existing programs for **Municipal Facilities** and activities will be continually improved. City facilities are extensive and have progressed at different rates within the various departments based upon the funding available and the individuals heading those efforts. The City must continually evaluate its business practices and modify them as appropriate to protect water quality.



Future Challenges

We realize that the challenges ahead are great, but we are not discouraged. Our primary goal to

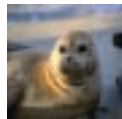


maximize water quality protection through effective and efficient use of resources will remain. As the State of California's resources

shrink and the state and local economies struggle, the City and the State will face budget cut-backs that will impact environmental programs. Our shared challenge will be to maintain water quality program progress with fewer dollars.

The **Resources** available will limit our effort, but not our commitment to clean water. We are currently spending \$29 million annually on Storm Water Pollution abating efforts in the

Timeline/Milestones	2001 July	September	October	October
	<p>\$4.5 Million from Governor's Clean Beaches Initiative Received</p> <p>Funding received from the State for Mission Bay and San Diego River projects</p>	<p>Dog Beach Clean up</p> <p>Park & Recreation and volunteers clean up "piles" from area</p>	<p>Updated Storm Water Ordinance Inacted</p> <p>Changes to the San Diego Land Development Code and Municipal Code §43.03</p>	<p>Citywide General Storm Water Training Starts</p> <p>All 37 City Departments and Mayor, Council Districts 1-8 and City Attorney begin educating staff on Storm Water Pollution Prevention</p>



City of San Diego. Approximately **\$30 million in additional** annual funding is needed to fully implement the City's Urban Runoff Management Plan (**Figure A**). Implementation of all activities is dependent upon identification of funding in future yearly budgets and City Council approval. Given the limited resources of the City's General Fund to support the additional program costs, regional approaches are being explored including new **User Fee Revenues for Urban Runoff Management**. This is why our current education and outreach efforts are so important. Only the general public's greater understanding of the issue will bring about the support needed to establish an urban runoff management fee, which requires a vote of the people. We will continue to be innovative and work cooperatively with others to realize the greatest amount of water quality benefits for San Diego.

We struggle with **How to Measure Success** but we are not unique; difficulty in measuring success is something that we share with storm water

managers throughout California. Managers require **Better Data Management and Program Assessment Tools**. A need for better tools is recognized across the board from the regulators, businesses, and the environmental community. Merely compiling data is an enormous challenge for an organization the size of the City of San Diego which has 27 departments and more than 12,000 employees involved in gathering, tabulating and sharing annual reporting data requirements for the permit. Currently, much of the data collection is done manually and cannot be easily manipulated or queried. In the future, we hope to have resources to integrate the inventories and other information into Geographic Information System (GIS). We also desire to create watershed based web-based depositories for water quality data from all sources. We have submitted grant applications with partners who share this vision on two occasions thus far. A data management tool is needed to allow for greater understanding and therefore, better decision-making.

Total Maximum Daily Loads (TMDLs) will challenge us all. Our preliminary assessment indicates that the costs to comply with TMDL requirements are substantial relative to the existing storm water program efforts. TMDLs may not



be the best approach to use in meeting our clean water goals given the scarce resources available. TMDLs establish numeric limits and load allocations for urban runoff and storm water dischargers on specific areas of receiving waters (e.g. creek sections) and will have a huge impact on what happens in the future. For one, resources to fund these pollutant and watershed specific programs are not included in the City's Urban Runoff Management Plan costs and will need to be found without endangering the funding for these very critical storm water plans outlined in the URMP. We believe that the costs of TMDL requirements with respect to the overall program costs may have been vastly underestimated. For example, the recently adopted TMDL for diazinon in Chollas Creek will require a 25 percent increase in program spending to meet the water quality monitoring requirements which will not clean the water. A funding source for the Best Management Practices to clean the

water is unidentified. Without other funding sources, the costs for the TMDLs may be diverted from the URMP. With additional TMDLs currently being developed for Chollas Creek and other waterbodies, the demand for more dollars is clearly recognized. Just how to fund these needs in these tough economic times is a quandary. Urban runoff is a very complicated issue and not well understood in terms of how best to realize immediate pollution reduction because it comes from many sources. Addressing each pollutant individually with a TMDL, although based upon the Federal Clean Water Act, creates a situation where pollutants will compete with each other for limited dollars. We believe that we could get clean water quicker by taking a different approach where all pollutants within a watershed or region are considered together and action integrated on a programmatic basis.

Challenges to achieving clean water will always present themselves. Yet, the City of San Diego remains determined to succeed. In our first year, we have laid the foundation for long-term success and are in the midst of a tremendous cultural shift both with our employees and the residents, businesses and industry that call San Diego home. We're off to a tremendous start but have a long way to go.

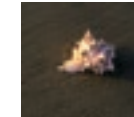
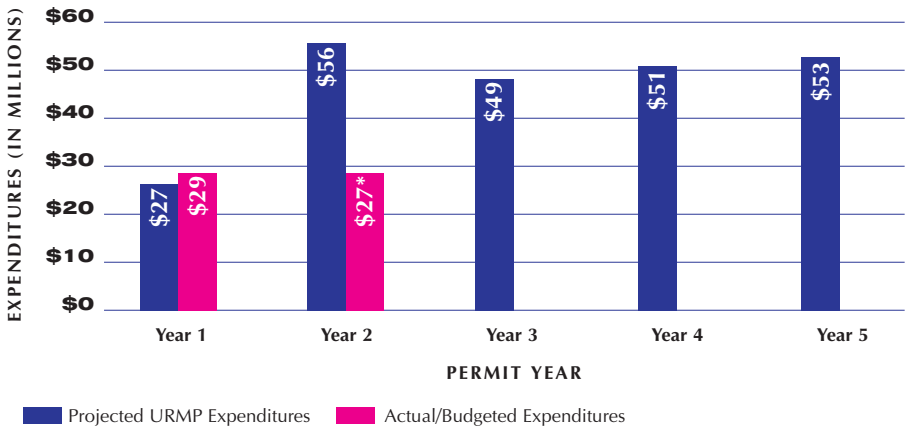
Sincerely,

Karen Henry
Deputy Director
Storm Water Pollution Prevention Division
General Services



Figure A

The chart displays the City's projected annual expenditures (as initially submitted in the Urban Runoff Management Plan) versus the actual expenditures spent for Permit Year 1 (Fiscal Year 2002) and the anticipated amount to be expended in Permit Year 2 (Fiscal Year 2003).



Timeline/Milestones	2001 November	2002 January	June	June
	Think Blue campaign Relaunched	Urban Runoff Management Plan Adopted	Localized Equivalent Area Drainage (LEAD) Method Approved	Citywide General Storm Water Training Completed
	The City produced and aired three public service announcements intended to increase awareness of urban runoff	City's Jurisdictional Urban Runoff Management Plan adopted by City Council	San Diego Regional Water Quality Control Board adopts the Model SUSMP with the City's LEAD method which will allow clean water quicker in urbanized areas	Mandatory General Storm Water Pollution Prevention training for all employees

Mission Bay Challenges



ACKNOWLEDGMENTS



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Councilmember Donna Frye, *City of San Diego*

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